Name: _____ Date: _____ Period: _____

Geometry Summer Packet: DUE FIRST DAY OF SCHOOL (Daily Grade)

This packet is required for all upcoming Geometry students and is a review of topics covered in your previous math courses. It is essential that you have mastered these skills PRIOR to taking Geometry.

During the first week of school, you will be given a **quiz** over the topics covered in this packet.

I have created a class in DeltaMath and have linked additional practice for your convenience. If you are struggling with a topic, find it in the DeltaMath assignment and look at the worked examples. You may also practice similar problems until you have mastered the skill. The DeltaMath assignment is not mandatory, it is simply there for you to use if needed.

DeltaMath code: R332-8F4N

Below are some formulas that you may find useful:

Linear Functions

Slope Formula: $m = \frac{y_2 - y_1}{x_2 - x_1}$

Point Slope Form: $y - y_1 = m(x - x_1)$

Slope Intercept Form: $y = mx + b$

Standard form: $ax + by = c$

Pythagorean Theorem: $a^2 + b^2 = c^2$

Name: _____ **Geometry Summer Packet**

1. Solve for w.

$$9 = 5 + w$$

2. Solve for r.

$$10 = r + 8$$

3. Solve for r.

$$7 = -7r$$

4. Solve for x.

$$9x = 54$$

5. Solve for n. You must write your answer in fully simplified form.

$$-2 = 9n$$

6. Solve for x. You must write your answer in fully simplified form.

$$4x = 17$$

7. Solve for a.

$$\frac{a}{7} = 1$$

8. Solve for s.

$$4 = \frac{s}{-2}$$

9. Solve for b and simplify your answer.

$$-20 = -\frac{5}{3}b$$

10. Solve for t and simplify your answer.

$$\frac{5}{6}t = 8$$

11. Solve for x.

$$-\frac{x}{8} - 11 = -2$$

12. Solve for y.

$$-1 = -1 - 6y$$

13. Solve. $3(5x + 1) = -87$

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14. Solve. $2(6x + 10) = -88$

15. Solve for x in simplest form.

$$12 = \frac{3}{4}(3x + 8)$$

16. Solve for x in simplest form.

$$8 = \frac{2}{3}(4x - 6)$$

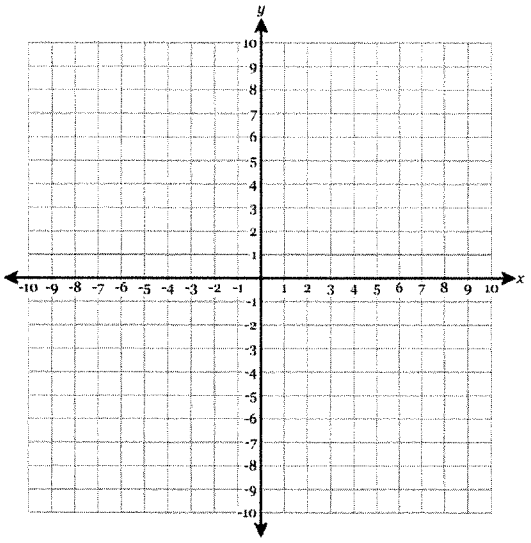
17. Solve for x:

$$7x - 3 = 8x - 2$$

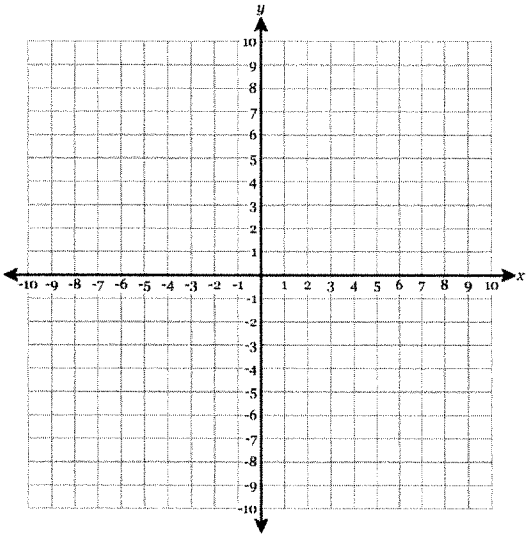
18. Solve for x:

$$-13x + 7 = -9x + 11$$

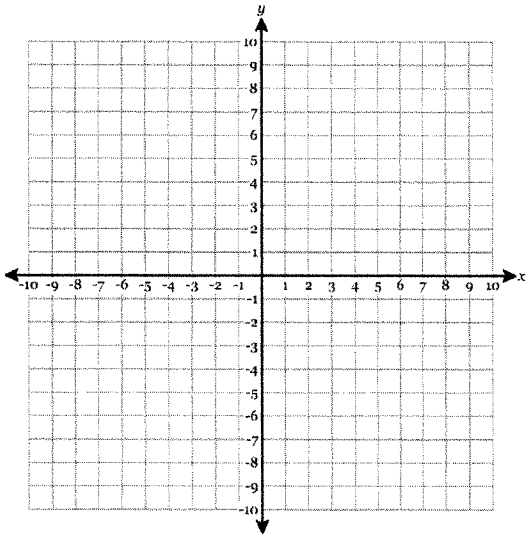
19. Plot the point $(-3, -2)$.



20. Plot the point $(0, -4)$.

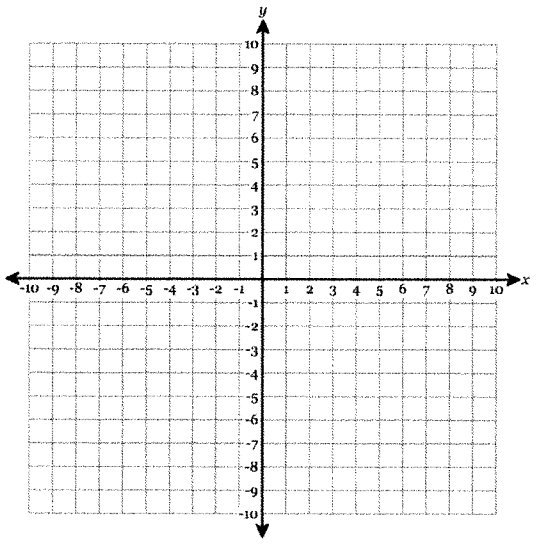


21. Graph the line with the equation $y = -x - 6$.

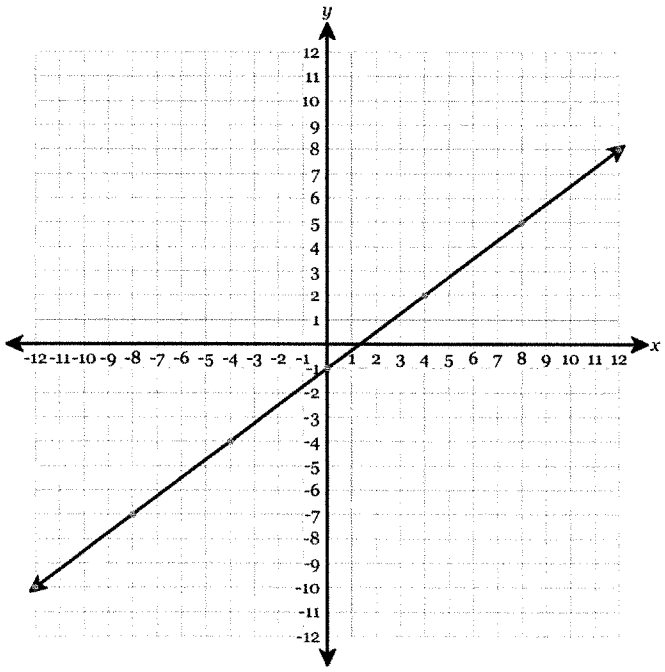


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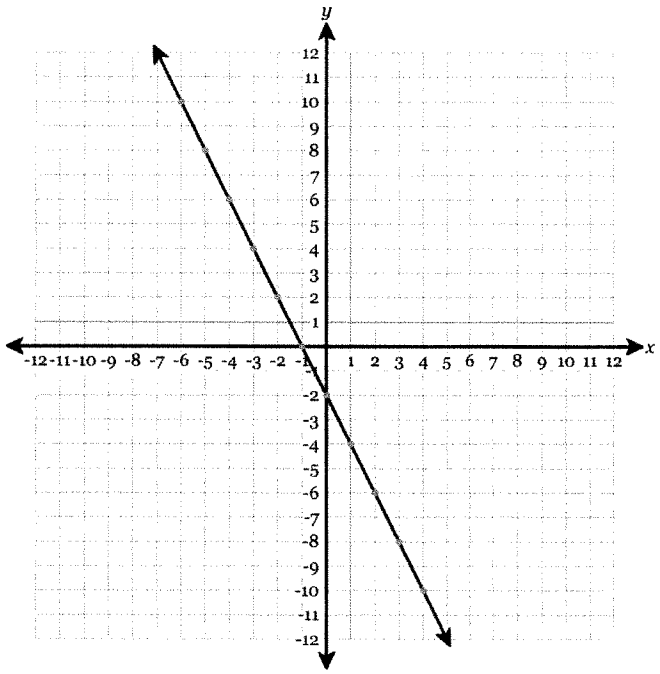
22. Graph the line with the equation $y = \frac{1}{6}x + 4$.



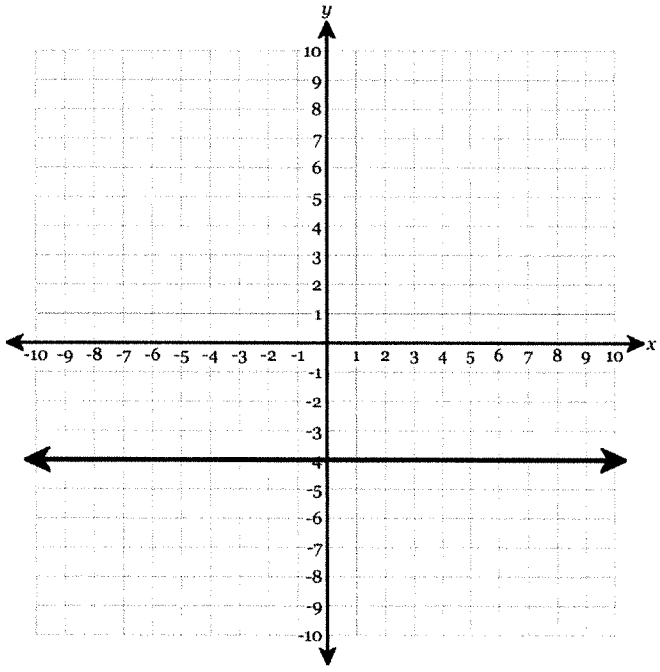
23. Write the equation of the line in fully simplified slope-intercept form.



24. Write the equation of the line in fully simplified slope-intercept form.

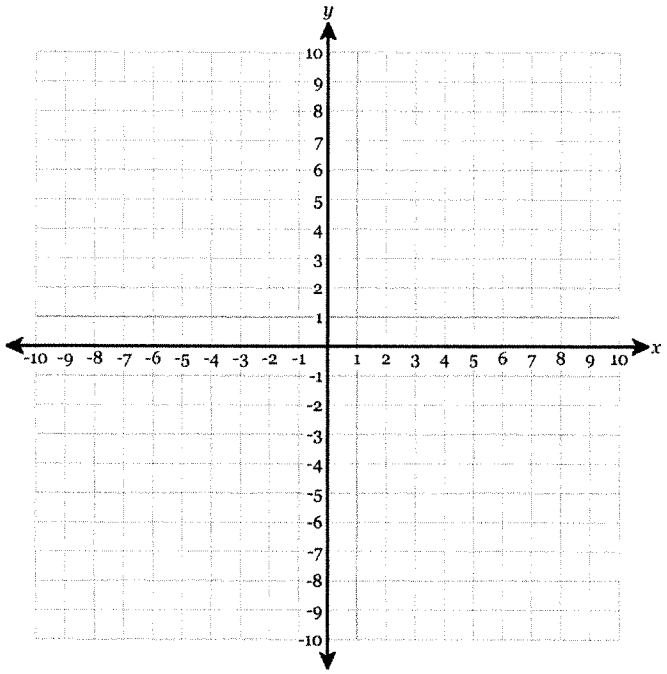


25. Write the equation of the line graphed below in simplest form.

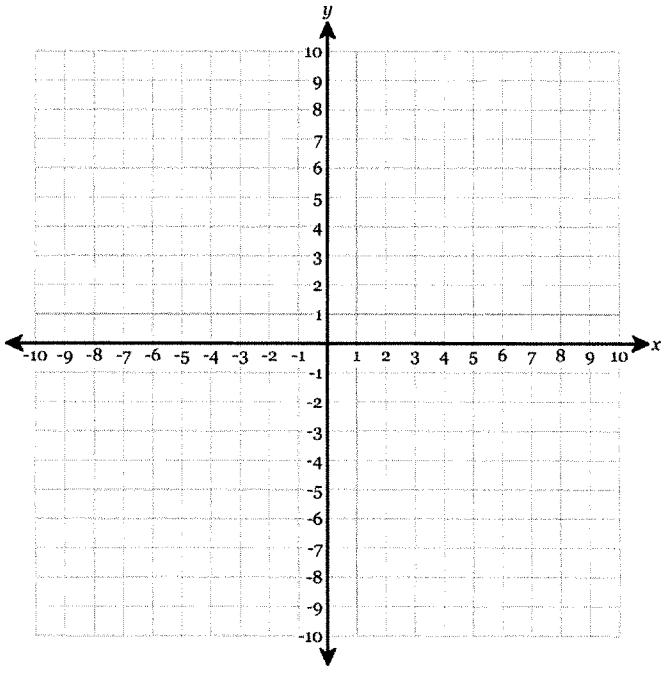


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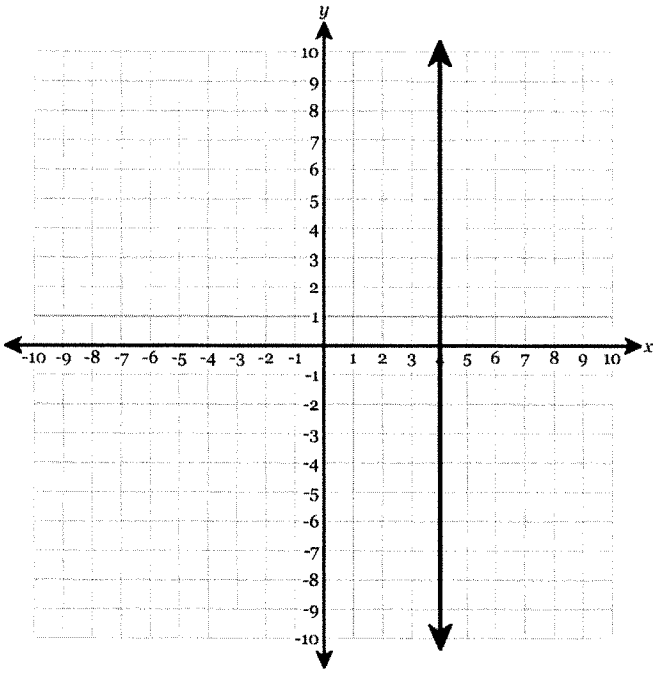
26. Graph the line $x = 3$ on the axes shown below.



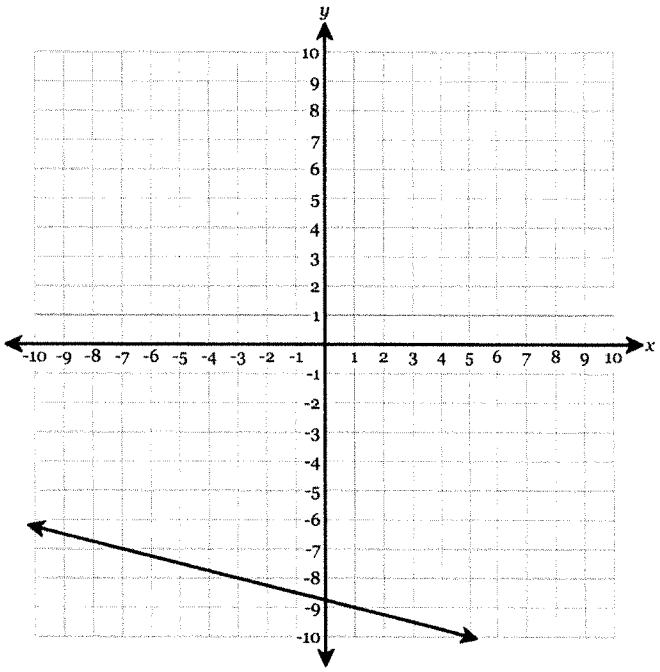
27. Graph the line $y = -6$ on the axes shown below.



28. Write the equation of the line graphed below in simplest form.

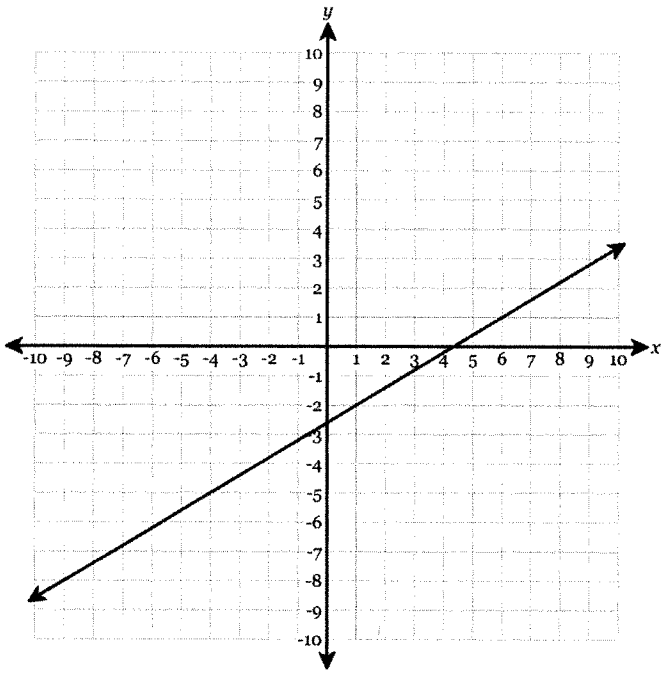


29. Draw a line representing the "rise" and a line representing the "run" of the line. State the slope of the line in simplest form.



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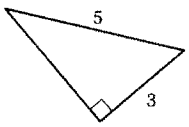
30. Draw a line representing the "rise" and a line representing the "run" of the line. State the slope of the line in simplest form.



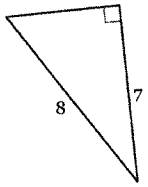
31. What is the slope of the line that passes through the points $(-8, 6)$ and $(-11, 12)$? Write your answer in *simplest form*.

32. What is the slope of the line that passes through the points $(8, -10)$ and $(5, -7)$? Write your answer in *simplest form*.

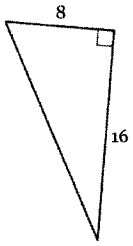
33. Find the length of the third side. If necessary, round to the nearest tenth.



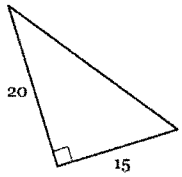
34. Find the length of the third side. If necessary, round to the nearest tenth.



35. Find the length of the third side. If necessary, round to the nearest tenth.



36. Find the length of the third side. If necessary, round to the nearest tenth.

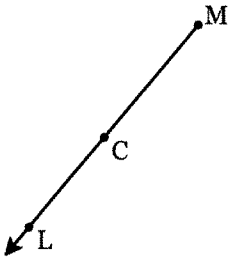


37. Name the figure below in two different ways.



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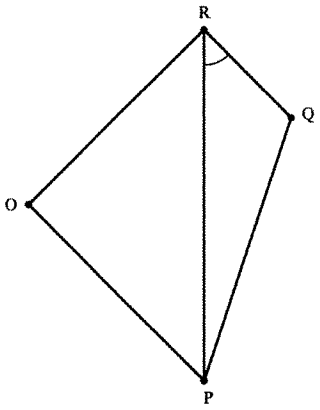
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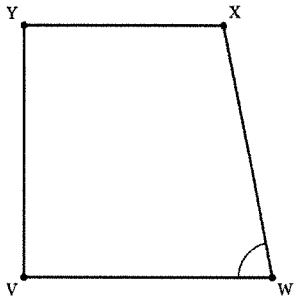
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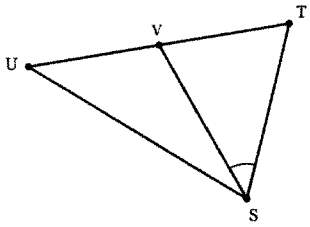
40. Name the marked angle in 2 different ways.



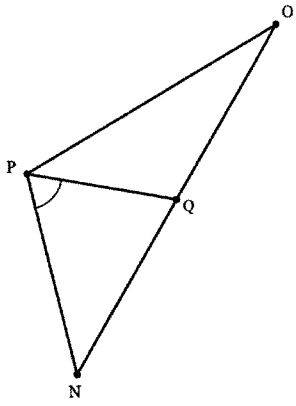
41. Name the marked angle in 2 different ways.



42. Name the marked angle in 2 different ways.

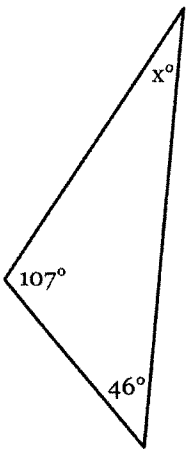


43. Name the marked angle in 2 different ways.

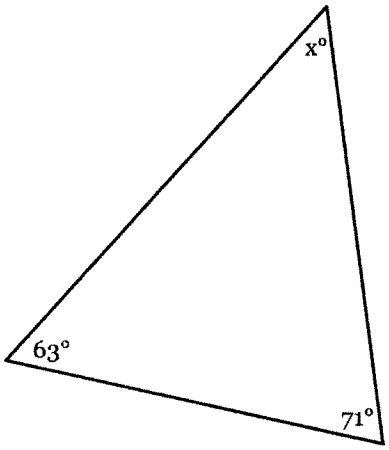


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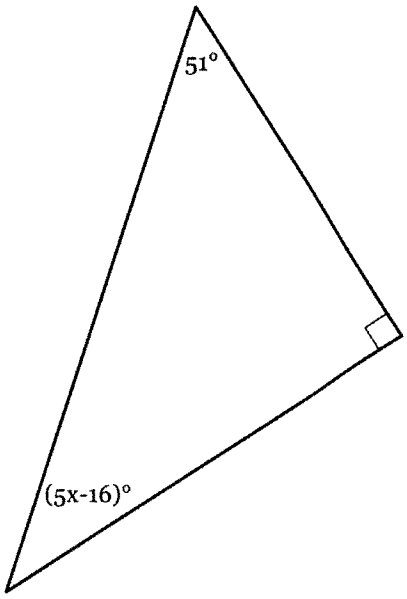
44. The measures of the angles of a triangle are shown in the figure below. Solve for x.



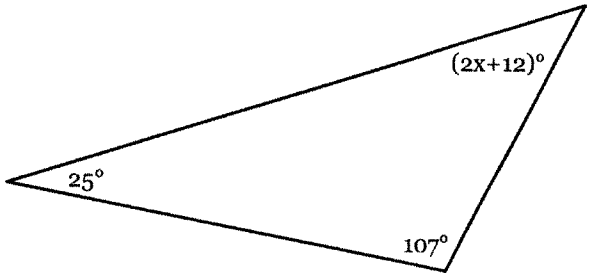
45. The measures of the angles of a triangle are shown in the figure below. Solve for x.



46. The measures of the angles of a triangle are shown in the figure below. Solve for x.



47. The measures of the angles of a triangle are shown in the figure below. Solve for x.



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